
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Yen
Application No.: 09/578,816
Filed: May 24, 2000
Title: METHOD AND SYSTEM FOR
REDUCTION OF DELAY AND BANDWIDTH
REQUIREMENTS IN INTERNET DATA
TRANSFER

Attorney Docket No.: 1801-P001
Examiner: Shingles, Kristie D.
Group: 2141
Confirmation No. 5969

PRE-APPEAL BRIEF AND REQUEST FOR REVIEW

Commissioner for Patents

Dear Sir:

Applicant requests review of the Final Rejection dated October 14, 2009 in the above-identified application. This request is being filed with a Notice of Appeal. The review is requested for the reasons stated below.

PATENTABILITY OF THE CLAIMED INVENTION

Claims 5, 11, 12, 15, 17-25 and 28 are currently rejected. Specifically, in the Office Action, the Examiner rejected claims 15 and 17-24 under 35 USC § 102(e) as being anticipated by Agrusa et al., U.S. Patent No. 7,003,558; rejected claims 12, 25 and 28 under 35 USC § 103(a) as being unpatentable over Agrusa et al. in view of Singh, U.S. Patent 6,665,704; and rejected claims 5 and 11 under 35 USC § 103(a) as being unpatentable over Agrusa et al. in view of Yaamane et al., U.S. Patent 5,701,580. These rejections are fully traversed below.

Claim 15 pertains to a data transmission system for transmitting data from content servers to requestors through a data network. The data transmission system comprises a plurality of data distribution centers. Data transmissions occur between the content servers and the data distribution systems using a multi-destination format so as to reduce congestion.

Agrusa et al. describes a method for communicating information and controlling equipment with respect to an automated manufacturing environment. The system in Agrusa et al. can aggregate requests for information directed to a computer that controls a piece of process control equipment, obtain the information being requested, and deliver the information to the requestors.

As for multi-destination data packets, the Examiner references Agrusa et al., col. 2, line 66 to col. 3, line 14, and col. 9, lines 23-50.

In another aspect, the invention relates to a computer program recorded on a computer-readable medium. The computer program comprises a module that aggregates all requests for information directed to one of a plurality of interconnected computers in a process control environment, such as a factory. The module identifies each of the requesting computers, and delivers (according to the standard communication protocol for process control) the information to each of the requesting computers. At least the computer to which the requests are directed is in communication with at least one piece of process control equipment, and the requests are transmitted according to the standard communication protocol for process control by one or more of the other interconnected computers. After the requests are aggregated, the module communicates with the target computer (using the standard communication protocol for process control) and obtains the information.

Hence, Agrusa et al. includes a module that can aggregate requests for information from a computer in a process control environment, such as a factory. "The module identifies each of the requesting computers, and delivers (according to the standard communication protocol for process control) the information to each of the requesting computers." Here, Agrusa et al. teaches that the information requested is delivered to each of the requesting computers "according to the standard communication protocol for process control".

In contrast, claim 15 does not pertain to a process control environment for process control in a factory. Instead, claim 15 concerns a data transmission system having a plurality of data distribution centers. Data transmissions occur between content servers and the data distribution system uses a multi-destination format so as to reduce congestion. While Agrusa et al. teaches that the information requested can be delivered to each of the requesting computers "according to the standard communication protocol for process control", nothing in Agrusa et al. teaches or suggests anything about use of a multi-destination format to transfer a particular resource to the different requestors. In addition, col. 9, lines 40-44 of Agrusa et al. in discussing transmission of the requested information to the requesting computers, states:

The program identifies which of the computers in the network have requested the information, for example by maintaining a list of the requests as they are received, and transmits to each of the requesting computers a copy of the information that it obtained from the computer 306.

Consequently, Agrusa et al. describes that a list is maintained and used to transmit a copy of the information to each of the requesting computers. As a result, col. 9, lines 40-44 of Agrusa et al. teaches against any use of a multi-destination format for data transmissions.

Moreover, claim 15 also recites “wherein the multi-destination format uses multi-destination data packets, the multi-destination data packets include at least multiple destination fields and a data field.” Agrusa et al. does not teach or suggest any use of multi-destination data packets and therefore can likewise not teach or suggest multi-destination data packets include at least multiple destination fields and a data field.

Hence, it is respectfully submitted that the Examiner should withdraw the rejection of claim 15 under 35 USC § 102(e) as being anticipated by Agrusa et al.

Claim 21 pertains to a system for transmitting data through a data network from servers to clients. Claim 21 recites a plurality of data distribution centers and use of multi-destination packets to carry the data to at least one data distribution centers. For similar reasons as noted above with respect to claim 15, Agrusa et al. fails to teach or suggest use of multi-destination packets to transmit data between data distribution centers. It is, therefore, respectfully submitted that the Examiner should withdraw the rejection of claim 21 under 35 USC § 102(e) as being anticipated by Agrusa et al.

Claim 12 pertains to a method for sending data over the Internet. Among other things, the method receives a plurality of requests (from different requestors) for a particular resource provided at a remote server on the Internet, and retrieves the particular resource from the remote server once for the plurality of requests to obtain the particular resource requested by the plurality of requests. The particular resource can then be transferred to the different requestors. The transfer of the data follows a specific process specified in claim 12. Such specific process uses a data distribution center and multi-destination data packets to efficiently transfer the particular resource to the different requestors.

In contrast, Agrusa et al. lacks any teaching or suggestion for use of a data distribution center or multi-destination data packets to transfer a particular resource to different requestors. Agrusa et al. merely mentions “a module that aggregates all requests for information directed to one of a plurality of interconnected computers in a process control environment, such as a factory.” Agrusa et al., col. 2, line 67 to col. 3, line 3. However, the aggregation noted Agrusa et al. pertains to a process control environment, not a data distribution center. Further, Agrusa et al. states: “[t]he module identifies each of

the requesting computers, and delivers ... the information to each of the requesting computers." Agrusa et al., col. 3, lines 3-6. Neither the aggregation of requests nor the delivery of the requested information as described in Agrusa et al. offers any teaching or suggestion for any use of multi-destination packets.

Furthermore, even if Singh were to be combined with Agrusa et al. as proposed by the Examiner, Singh would not overcome the deficiencies of Agrusa et al. noted above. Singh pertains to a proxy server that provides caching of information received from a server and then transmitting the information to multiple concurrent clients. Singh does not use of multi-destination packets. Instead, Singh merely uses multiple processing threads to deliver the information from the local cache to the requesting clients.

Therefore, it is respectfully submitted that the Examiner should withdraw the rejection of claim 12 under 35 USC § 103(a) as being unpatentable over Agrusa et al. in view of Singh.

Claim 25 pertains to a method for transferring data through a data network from a server to clients. The method recites the transferring of data between the server and a data distribution center using a multi-destination format. As previously noted, Agrusa et al. and Singh both fail to teach or suggest use of a multi-destination format for the transfer of data to a data distribution center. Therefore, it is respectfully submitted that the Examiner should withdraw the rejection of claim 25 under 35 USC § 103(a) as being unpatentable over Agrusa et al. in view of Singh.

Claim 5 pertains to a method for sending data over the Internet. Agrusa et al. is not operating to process requests for electronic resources from a remote server over the Internet and then to send the requested resource to a plurality of requestors. More particularly, claim 5, among other things, recites "retrieving the particular resource from the remote server once for the plurality of requests to obtain the particular resource requested by the plurality of requests" (claim 5, lines 5-6). Furthermore, claim 5 recites "said receiving and/or said sending are performed after a predetermined quantity of the plurality of requests have been received" (claim 5, lines 8-9). While the Examiner admits this deficiency of Agrusa et al. (Office Action, page 6), the Examiner combines Yamane et al. with Agrusa et al. However, Yamane et al. describes a system in which data can be wireless broadcast to a particular area. It appears that the broadcast can be done at a fixed time (e.g., 5:00 am) or when the number of requests from an area. See Fig. 8. Hence, Yamane et al. merely provides a wireless broadcast of data to anyone in an area

(e.g., area m in Fig. 8). As such, Yamane et al. fails to teach or suggest forming or transmitting multi-destination data packets to send the data to particular requestors. Nothing in Agrusa et al. or Yamane et al. teaches or suggests any notion of such processing of a predetermined quantity of requests for a particular resource.

Therefore, it is respectfully submitted that the Examiner should withdraw the rejection of claim 5 under 35 USC § 103(a) as being unpatentable over Agrusa et al. in view of Yamane et al.

Claim 28 pertains to a system for sending data over the Internet. Agrusa et al. is not operating to process requests for electronic resources from remote server over the Internet and then to send the requested resource to a plurality of requestors. More particularly, claim 28, among other things, recites “means for retrieving the particular resource from the remote server once for the plurality of requests to obtain the particular resource requested by the plurality of requests” (claim 28, lines 6-8). Claim 28 also recites use of “multi-destination data packets” to subsequently send data of the particular resource to a plurality of different requestors for such data. Neither Agrusa et al. nor Singh provide any teaching or suggestion for multi-destination data packets. Therefore, it is respectfully submitted that the Examiner should withdraw the rejection of claim 28 under 35 USC § 103(a) as being unpatentable over Agrusa et al. in view of Singh.

Based on the foregoing, it is submitted that claims 5, 12, 15, 21, 25 and 28 are patentably distinct from Agrusa et al., Singh and/or Yamane et al. In addition, it is submitted that dependent claims 17-20 and 22-24 are also patentably distinct for at least the same reasons as their corresponding independent claim. The additional limitations recited in the independent claims or the dependent claims are not further discussed as the above-discussed limitations are clearly sufficient to distinguish the claimed invention from Agrusa et al. Singh and/or Yamane et al. Thus, it is respectfully requested that the rejections under 35 USC §§ 102(e), 103(a) be withdrawn.

I am the attorney or agent acting under 37 CFR 1.34

Respectfully submitted,
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